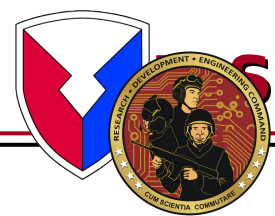




Technology to the Warfighter



US Army Research, Development & Engineering Command

Mission: Get the right integrated technologies into the hands of warfighters quicker.

What we do:

Technology Out of the Laboratories and into the Hands of Warfighters in the Shortest Time
 Direct Support of the Tech Base to Future Combat System (FCS) and Future Force
 Manage Speed and Complexity of Technological Change to Operational Needs
 Systems Engineering, Assessment, and Analysis
 Engineering support to PEOs/PMs, Materiel Management Centers and Current Force
 Identify Foreign Technologies for US Army Use

What we manage:

8 Labs and Research, Development, and Engineering Centers (RDECs)
 Army Materiel Systems Analysis Activity (AMSAA)
 Foreign Comparative Testing & Defense Acquisition Challenge Program
 Regional International Technology Centers
 Capability & Technology Integrated Process Teams
 Agile Development Center

The Magnitude:

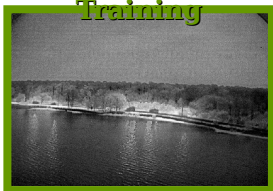
Over 17.5K Military, Civilians, and Direct Contractors
 75% of Army Science and Technology Objectives
 All Army Advanced Technology Demonstrations (ATDs)
 6 of 13 Advanced Concept Technology Demonstrations (ACTDs)
 20 Foreign Comparative Testing (FCT) & 7 Defense Acquisition Challenge Programs (DACPs) with 13 different Countries



**Strike
(Exploit FCS Netted
Fires)**



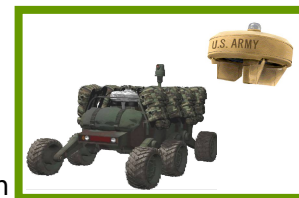
**Human
Performance &
Embedded
Training**



**Sensory
Enhancement**



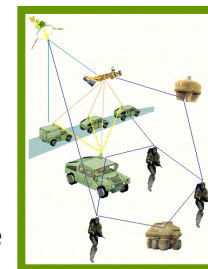
**Battery Charging
Fuel Cell with
Methanol Steam
Reforming Unit**



Robotics Interface



**Future Force
Warrior**



**Collaborative Networked
Situational Understanding**



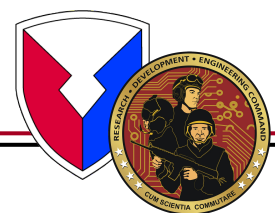
**Protective Mask
& JLIST - Joint Service
Lightweight
Integrated Suit
Technology**

**RDECOM
Operates
World-
wide**



**Over 300 International Agreements
Linkage to Combatant Commanders - FAST
Teams
Engineer and Scientist Exchange Program**

Technology to the Warfighter



Linkage to Combatant Commands (FAST)

EUROPEAN DIVISION



USAREUR
Heidelberg, GE



7th ATC
Grafenwöhr, GE



V Corps
Heidelberg, GE



EUCOM
Stuttgart, GE



SETAF (A)
Vicenza, IT



EUSA/USFK
Seoul, KOR



USARPAC
Ft. Shafter, HI

PACIFIC DIVISION



ALCOM/USARAK
Ft. Richardson, AK



NTC
Ft. Irwin, CA



III Corps
Ft. Hood, TX

CENTRAL DIVISION



I Corps
Ft. Lewis, WA



SOUTHCOM
Miami, FL



JFCOM
Norfolk, VA



XVIII Abn Corps
Ft. Bragg, NC



FORSOM
Ft. McPherson, GA

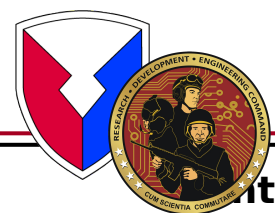


SOCOM
MacDILL AFB, FL



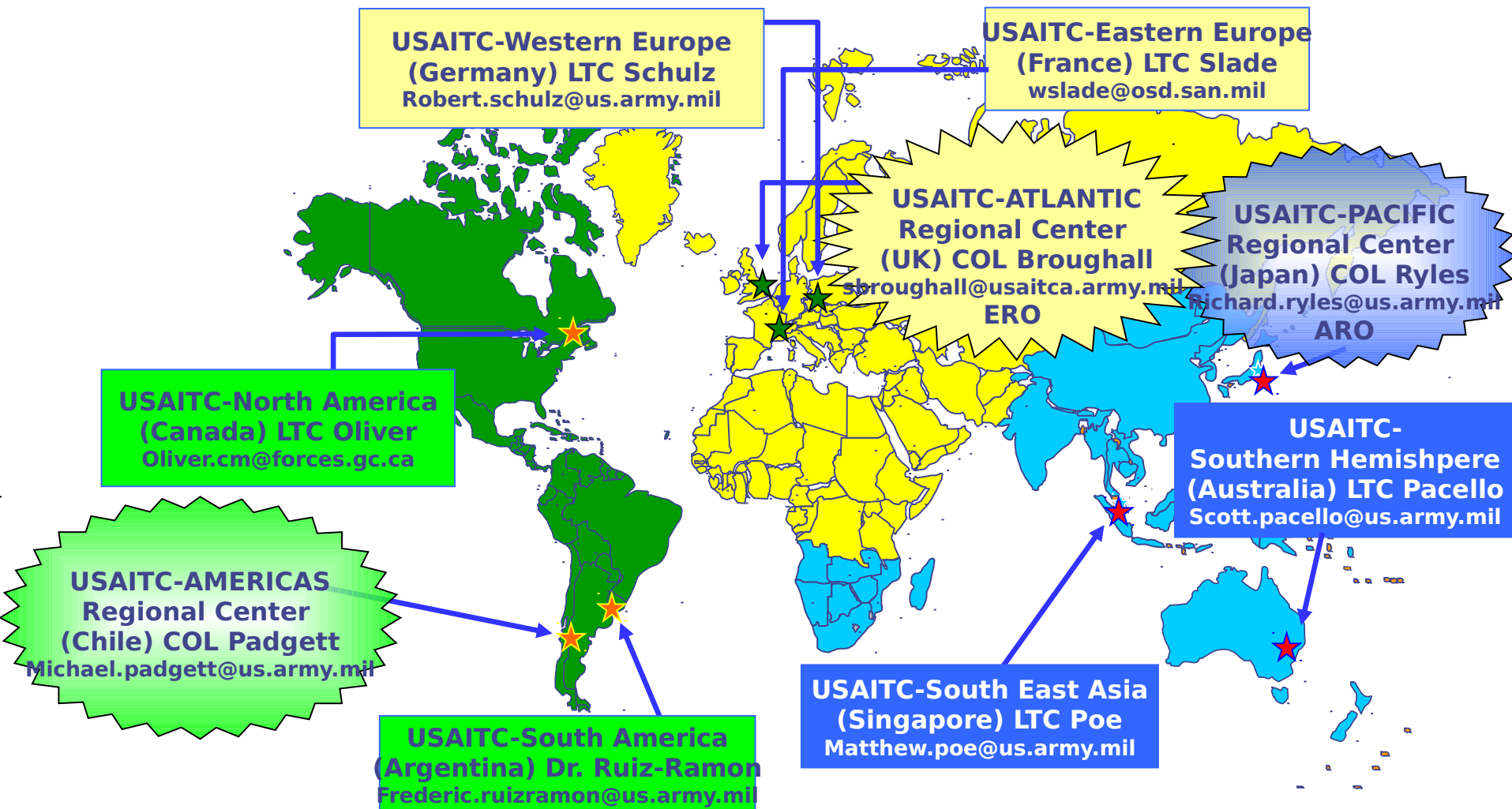
CENTCOM
MacDILL AFB, FL





Linkage to International Markets

International Technology Centers: Identifying S&T solutions worldwide.



Technology Information Papers are submitted on areas of interest to the Army from various foreign government, industry and academia.

Technology to the Warfighter

Support to Current Operations

**HMMW
V
Doors**



**Tear-off
Windshield
Id
Film**



**Predator
Hellfire
Integrati
on**



**Shelf-Stable
Pocket Sandwich**



**Cooperative
Defense Initiative**



**Omni-Directional
Inspection System**



**40mm
Thermobaric
Cartridge**



Zinc-Air Battery



**Interceptor Body Armor
& Advanced Combat Helmet:
Dozens of Lives Saved
During OEF/OIF**



**Aerial
Delivery**



Bunker Defeat Munition



Phraselator



Mobile Lab



**Field Expedient Protection
for Ground Vehicles**



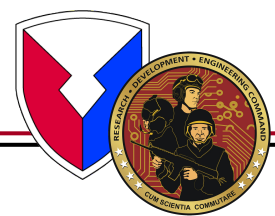
WelCam



**Slat
(Bar)
Armor**



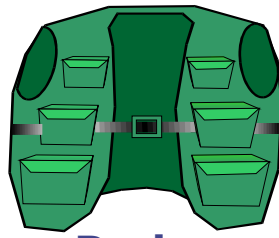
Technology to the Warfighter



The Future



FCS



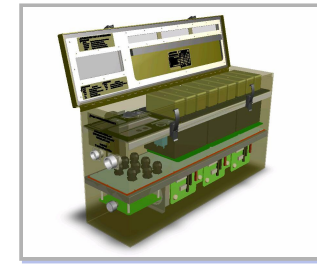
Body-Conformable Power



Fuel Cell APU



Future Force Warrior



Battery Chargers



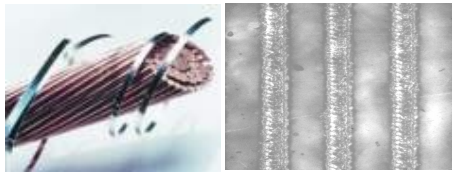
Hybrid



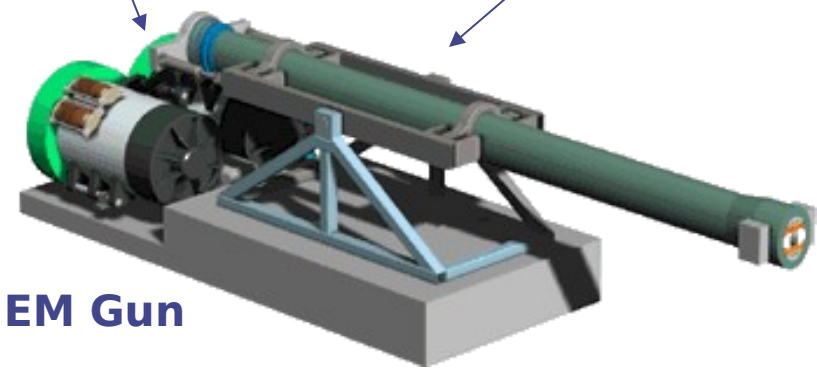
In-Hub Motor



Cryocoolers



High Temp Silicon



EM Gun



Gas to Liquid

The Environment - "The Perfect Storm"

Army Strength
30,000 to
100,000
additional troops

BRAC

GWOT
One month
OPTEMPO
= one year
design life

Resources
Supplementals ?
Return to
Core Budget

Modularity
Increase
from 33 to
43 (?) UAs

Transformation
on
(Modernization)

QDR
Gain/Divest
Missions

S&T ?





Partnering

- **Department of Energy Labs**
 - **Member of Board of Directors**
 - **Member of Technology and Capability IPTs**
- **Other Service Labs**
 - **Naval Research Lab**
 - **Air Force Research Lab**
- **Academia**
 - **~ 300 academic partners in 50 states**
 - **University Affiliated Research Centers**
 - ✓ **Institute for Advanced Technology - University of Texas at Austin**
 - ✓ **Institute for Creative Technology - University of Southern California**
 - ✓ **Institute for Soldier Nanotechnology - Massachusetts Institute of Technology**
 - ✓ **Institute for Collaborative Biotechnology - University of California at Santa Barbara, Massachusetts Institute of Technology, and California Institute of Technology**
 - **Collaborative Technology Alliances**
- **Industry**
 - **Small Business Innovative Research**
 - **Cooperative Research and Development**
 - **Collaborative Technology Alliances**

**“Our ultimate customer is the
Soldier...**

**My son or daughter, your son or
daughter
...who will judge our efforts with
their
lives and their mission
accomplishment.**

**This is a sacred trust
which will not be compromised.”**

Larry G. Lebowicz
Major General (Ret.)

